

--23. (new) A method as claimed in claim 22, wherein the pigment is a carotenoid.

C1
Cant
--24. (new) A method as claimed in claim 23, wherein the carotenoid is beta-carotene.

--25. (new) A method as claimed in claim 20, wherein the culture media is brine.--

REMARKS

This application has been amended in a manner that is believed to place it in condition for allowance at the time of the next Official Action.

Claims 1-15 have been canceled. New claims 16-25 have been added. Claim 16 recites that the crystalline-metallic-ore particles absorb or adsorb a fat-soluble compound to form a crystalline-metallic-ore-fat-soluble-compound complex which has a bulk density that is less than that of metallic ore.

Moreover, claim 16 recites that the fluidized bed forms an upper and lower zone. The lower zone comprises crystalline-metallic-ore particles. The upper zone comprises crystalline-metallic-ore-fat-soluble-compound complex particles. The crystalline-metallic-ore-fat-soluble-compound complex is then

collected from the upper zone of the fluidized bed. Support for claims 16-25 may be found in original claims 1-15 in the specification at page 8, lines 13-25.

In the outstanding Official Action, claim 14 was rejected under 35 USC §102(b) as allegedly being anticipated by CURTAIN et al.

It is believed that the present amendment obviates this rejection. In the interest of advancing prosecution, claim 14 has been canceled.

Claims 1-12 and 15 were rejected under 35 USC §103(a) as allegedly being unpatentable over CURTAIN et al. in view of WEITZEN et al. It is believed that the present amendment obviates this rejection.

Applicants believe that the proposed combination of CURTAIN et al. in view of WEITZEN et al. fails to disclose or suggest the claimed invention.

As noted above, claim 16 recites that the crystalline-metallic-ore particles absorb or adsorb the fat-soluble compound to form a crystalline-metallic-ore-fat-soluble-compound. However, CURTAIN et al. and WEITZEN et al. both fail to disclose or suggest that magnetite can absorb or adsorb beta carotene. Moreover, both publications fail to teach that the density of the magnetite will decrease upon doing so.

Applicant also notes that the present invention provides for recovery rates of beta carotene on the order of 97% (see example 3). This is a significant increase as to the recovery rates taught by CURTAIN et al. For example, CURTAIN et al. teach recovery rates of 70% and 84% (see examples 2 and 16 in CURTAIN et al.). Moreover, CURTAIN et al. unequivocally state that their process is applicable only to brines with a salt concentration of at least 3M. However, the Examiner's attention is respectfully directed to example 1 wherein the process of the present invention works at salt concentrations of 1M.

Applicant further notes that claim 16 recites that the crystalline-metallic-ore-fat-soluble-compound complex may be collected from the upper zone of the fluidized bed. As noted above, this process allows for the continuous and exclusive removal of beta carotene-loaded particles from the upper zone of the fluidized bed. This stands in direct contrast to WEITZEN et al. WEITZEN et al. teach that the loaded particles are removed from the bottom of the fluidized bed.

Thus, it is believed that the proposed combination of CURTAIN et al. in view of WEITZEN et al. fails to disclose each and every recitation of the claimed invention. As a result, the proposed combination of CURTAIN et al. in view of WEITZEN et al. fails to render obvious the claimed invention.

In view of the present amendment and the foregoing remarks, therefore, it is believed that the present application

Peter James KEATING S.N. 09/936,213

is now in condition for allowance, with claims 16-25, as presented. Allowance and passage to issue on that basis are accordingly respectfully requested.

Respectfully submitted,

YOUNG & THOMPSON

By

Philip A. DuBois

Philip A. DuBois
Agent for Applicant
Registration No. 50,696
745 South 23rd Street
Arlington, VA 22202
Telephone: 703/521-2297

June 13, 2003